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                  2 --> JP11058635/PN
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L1 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

Full Text

ACCESSION NUMBER:

1999:142110 CAPLUS

DOCUMENT NUMBER:

TITLE:

Inflation multilayer films using LLDPE prepared by

APPLICATION NO.

using metallocene polymerization catalysts

Hamata, Naoshi; Nishimura, Toshihiro; Inoue, Hiroshi INVENTOR(S): INVENTOR(S):

PATENT ASSIGNEE(S):

Mitsui Chemicals Inc., Japan

COURCE:

Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

KIND DATE

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

130:253422

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: DATENT NO

	PATENT NO.	ななれた	DAID	THE DECLINE TO THE	
	JP 11058635	A2	19990302	JP 1997-215188	
PRIC	RITY APPLN. INFO.:				19970808
AB	mitle films, suital	ole for	packaging co	ontents of 5-15 kg, e.g	g., rice,
. —	fertilizers, etc	consist	of (A) insi	ide layers contg. 100 p	parts LLDPE
	prend by using me	tallocer	ne catalysts	and having d. 0.920-0	.935 g/cm3,
	melt flow rate (MF)	R: ASTM	D 1238, 190°	o, 2.16 kg) 0.5-2.5 g/:	LO min
	and 0 1-1.0 part at	ntistati	ic agents, (P	3) intermediate layers	made of HDPE
	having d 0.950-0.	965 g/cm	n3, MFR 0.3-6	$5.0  ext{ q/10 min, and (C)}  ext{ (C)}$	outside layers
	contg 100 parts L	LDPE pre	end. by using	metallocene polymn. (	catalysts and
	having d 0 918-0.	935 a/ct	m3, MFR 0.5-5	5.0  g/10  min and  0.01-0	0.3 part elip
	egents at $t1/t0 =$	0.3-2 ar	nd t2/t0 = 0	.5-1.5 (t0 = thickness	of the inside
	lavers: t1 = total	thickne	ess of the in	ntermediate layers; t2	= thickness of
	the outside lavers	). Thus	s. LLDPE (d.	0.928 g/cm3, MFR 1.8	g/10 min;
	prend by using me	talloce	ne catalyst)	contq. 0.2 phr steary	l monoglyceride
	(Electrostripper T	S 5) as	the inside	layer, HDPE (d. 0.953 ;	g/cm3, MFR 0.6
	a/30 min) as the i	ntermed	iate laver. a	and LLDPE (d. 0.930 g/	cm3, MFR 1.0
	a/10 min prepd. b	v usina	metallocene	catalyst) contg. 0.04	phr erucamide
	(Alflow 10) as the	outside	e layer were	inflation-molded to g	ive title film
	showing dark impac	t stren	ath 600 g. f	lexural modulus (MD; m	achine
	direction) 4500 kg	/cm. an	d tear stren	gth 120 and 250 kg/cm,	for MD and
	GTT CC C T CTT) 4000 112	,,,		<del>-</del>	

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, transverse direction, resp.,.

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Full Text

ACCESSION NUMBER: 1999-224395 [19]
DOC. NO. NON-CPI: N1999-166769
DOC. NO. CPI: C1999-007077

Inflation multilayer film - has inner polyethylene layer, TITLE:

at least one intermediate layer and outer layer.

TITLE:

at least one

DERWENT CLASS:

A17 A92 P73

PATENT ASSIGNEE(S): (MITC) MITSUI PETROCHEM IND CO LTD

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KIND DATE WEEK LA PG PATENT NO JP 11058635 A 19990302 (199919)\* 7

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## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE				
.70 11058635	Δ	JP 1997-215188	19970808				

PRIORITY APPLN. INFO: JP 1997-215188 19970808

AN 1999-224395 [19] WPIX

JP 11058635 A UPAB: 19990813

Inflation multilayer film includes an inner layer, at least one intermediate layer, and an outer layer, where the inner layer is made of a composition (1) including 100 parts by weight of a metallocene-based straight-chain low density polyethylene A and 0.1 to 1.0 parts by weight of an antistatic agent B, the polyethylene A has a density of 0.920 to 0.935 g/cm3 and a melt flow rate of 0.5 to 2.5 g/10 min. (ASTM D 1238, 190 deg. C and load: 2.16 kg), the intermediate layer is made of a high density polyethylene C having a density of 0.950 to 0.965 g/cm3 and a melt flow rate of 0.3 to 6.0 g/10 min. (ASTM D 1238, 190 deg. C and load: 2.16 kg), the outer layer is made of a composition (2) composed of 100 parts by weight of a metallocene-based straight-chain low density polyethylene D and 0.01 to 0.3 parts by weight of a slip agent E, the polyethylene resin D has a density of 0.918 to 0.935 g/cm3 and a melt flow rate of 0.5 to 5.0 g/10 min. (ASTM D 1238, 190 deg. C and load: 2.16 kg), to/t1 is 0.3 to 2, and t2/to is the thickness of the inner layer, to, t1 and t2 are thicknesses of the inner layer, the entire intermediate layer and the outer layer, respectively.

USE - The inflation multilayer film is used for semi-heavy packing in polished rice and home vegetable fertilizer.

ADVANTAGE - The multi-layer film has high strength, rigidity and stiffness as well as high tear strength and dart impact strength. Dwg.0/0

=> log y COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	9.25	9.46
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.75	-0.75